

6 December 2023

Office of Future Transport Technology
Department of Infrastructure, Transport, Regional Development,
Communications and the Arts
Commonwealth Government of Australia

Submission via email: NRTTStrategyandCAVAActionPlan@infrastructure.gov.au

**Subject: 2024-27 National Connected and Automated Vehicle (CAV)
Action Plan**

Ford Motor Company of Australia Pty. Limited (Ford Australia) notes the invitation from the Department of Infrastructure, Transport, Regional Development, Communications and Arts (DITRDCA) to comment on its consultation in relation to the 2024-27 National Connected and Automated Vehicle (CAV) Action Plan.

Ford Australia is one of Australia's largest direct automotive employers, with a team of engineers, designers, technical, automotive, and other specialists working at five locations across Victoria. Australia-based engineers and designers lead the development of the Ford Ranger pickup and Ford Everest SUV models which are sold in more than 170 markets globally.

Ford Australia, with support from colleagues in Europe, North America and China, continues to monitor international forums and developments in the areas of emerging vehicle technology. Ford Australia places the user value as the central focus for effective introduction and adoption of this technology.

The content of this submission is aligned to the three workstreams outlined in the paper; Vehicle Automation, Vehicle Connectivity, and Cross-cutting actions supporting CAVs. In addition to preparing this submission, as a member of the Federal Chamber of Automotive Industries (FCAI), Ford Australia has provided input to the FCAI's submission to this consultation.

Workstream 1: Vehicle Automation

Ford Australia continues to engage and contribute on the development of the national regulatory framework for safely operating Automated Vehicles (AVs) in Australia.

Since the inception of this workstream, global AV technology and deployment perspectives have continued to evolve. Most recently, Ford Australia notes a trend towards broader deployment of Level 2 based capability. These systems offer safety benefits and play an important role in user engagement and education of the broader technology.

With the proposed draft legislation enabling the transition to highly automated vehicles (eg. Levels 3, 4, 5), Ford Australia notes substantial regulatory and infrastructure barriers that impact the ability to deploy Level 2 technology. Australian Design Rules (ADRs) currently mandate that vehicles fitted with lane keeping aids (Assist the Driver systems) monitor for direct driver control of the vehicle, then issue warnings and later deactivate these systems if driver steering input is not detected. Similarly, some state road rules mandate that a driver must be in contact with these vehicle controls. Subsequently, vehicles with Level 2 capability that are now deployed in USA, Canada, and some EU Member States cannot be legally operated in Australia.

In addition, infrastructure consistency and quality on major roads throughout Australia is a significant barrier to the utility of these Level 2 systems. Standardisation and consistent deployment of rules is a key area of focus for this technology to find greater utility in Australia. This includes, but not limited to:

- Lane markings
- Consistency of signage
- Demarcation and marking of road edges
- Lane widths

Ford Australia sees an opportunity to clarify actions to enable Level 2 adoption given industry trends. One example is the national coordination of state and territory laws and systems referenced in Action 1.4.

Ford Australia welcomes a focus on education with the broader community and sees an opportunity to extend this with the current and near-term Advanced Driver Assistance Systems (ADAS). ADAS is an important precursor to the potential future evolution of vehicle automation. Key to consumers adopting and understanding these systems is through positive experience and trust with the operation.

Workstream 2: Vehicle Connectivity

Ford Australia's perspective on vehicle connectivity remains consistent with the submission made to the *Principles for a National Approach to C-ITS in Australia* Consultation in February 2023.

It's important to distinguish and define the different elements and terminology of vehicle connectivity. Connectivity can be achieved through a number of mechanisms, but in this context the focus is on embedded connectivity in the form of; Cellular network / long-range communication (eg 4G), short-range communication (5.9GHz).

Vehicles with embedded modems that can communicate via the cellular network are widely available to Australian users today. Ford Australia has accumulated experience around customer adoption through the inclusion of this technology in its vehicles since 2020. Developing familiarity and trust through services that offer direct value is key to user engagement. An opportunity exists to build the user journey with deployment of long-range C-ITS use cases that have been adopted in other markets.

With the current uncertainty in the international approach on short-range technology, Australia has an opportunity to focus on the systems and areas that are potentially agnostic to the underlying technology. Action 2.1, 2.2 and 2.3 supports this approach, but could also consider long-range communication as a parallel activity. For Action 2.4, future investment in the development of new and advanced transport technologies also requires ongoing spectrum in the 5.9 GHz C-ITS band. Securing and maintaining a 70 MHz bandwidth with sufficient guard bands will be a key enabler for these future use cases.

At a high level, modern vehicles may typically include a common architecture, including connectivity systems, that is applied across a manufacturer's range of models and markets. Therefore, international standards harmonisation plays an important role in enabling the benefits for the Australian user.

Workstream 3: Cross-cutting actions supporting CAVs

It is encouraging to note plans which include a focus on regular industry engagement, monitoring of market trends, and alignment with best practice based on international developments. Ford Australia welcomes the opportunity to engage directly or via the FCAI in future discussions on these topics.

Ford Australia would highlight the opportunity in some situations to consider Connected Vehicles and Automated Vehicles separately in the 2024-27 timeframe. In order to build familiarity and engagement with the user, Ford Australia considers it important to not lose focus on delivering important near-term requirements and actions by potentially bundling connected and future automated technologies together.

Prioritisation of actions is key, and Ford Australia views regular check points with industry stakeholders as an important element to informing this work.



Ford Australia welcomes the opportunity for further consultation on this topic and appreciates the opportunity to provide its views to the Department. Please contact the undersigned should further information be required (email address provided separately).

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Ford Motor Company of Australia Pty. Limited

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